

## **METHOD OF TUNING A SENSOR ARRAY FOR OCCUPANCY SENSING IN A VEHICLE SEAT**

### **ABSTRACT OF THE DISCLOSURE**

A method of tuning the output of a sensor array for a vehicle seat occupancy sensing system that is used with a neural net for occupancy classification. The method includes the step of pressing a series of seat cushion body pressure distribution forms in a series of predetermined seating positions into a particular vehicle seat to produce a series of representative sensor response patterns from the sensor array. The method also includes the steps of comparing each sensor response pattern through the neural net and determining if any of the determined sensor patterns are indistinguishable, and then determining which sensors were deflected and the amount of deflection in those sensors for the indistinguishable sensor response patterns. The method steps further include adjusting the biasing of said sensors to cause said indistinguishable patterns to diverge and be distinguishable by the neural net and repeating the above steps until the sensor response patterns are distinguishable from one another.